

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (Previously presented) A multi-functioned wafer aligner comprising:
a multi-functioned unit for performing wafer centering, wafer flat zone alignment, and wafer damage detection;
the multi-functioned unit comprising:
a wafer rotator;
a sensor body comprising:
an array of luminous emitters disposed on a first surface of the sensor body for emitting incident rays;
an array of photo detecting sensors disposed on a second surface of the sensor body opposite the first surface for receiving the incident rays emitted by the array of luminous emitters; and
an array of damage-detecting sensors disposed on a third surface of the sensor body for receiving the incident rays that are reflected from edges of a wafer to detect wafer damage; and
a processor for determining positions of the wafer for performing the wafer centering and the wafer flat zone alignment based on light received by the array of photo detecting sensors, and determining wafer damage based on light received by the array of damage detecting sensors.
2. Cancelled

3. (Previously presented) The multi-functioned wafer aligner of claim 1, wherein the array of photo detecting sensors receive no incident ray when the wafer interrupts the incident rays from the array of luminous emitters.

4. (Currently amended) The multi-functioned wafer aligner of claim 46, wherein the processor further comprises an alarm unit when the second area receives reflected rays.

5. Cancelled

6. (Previously presented) The multi-functioned wafer aligner of claim 1, wherein a first area in the array of damage-detecting sensors receives reflected rays when the wafer is not damaged, and a second area in the array of damage-detecting sensors receives reflected rays when the wafer is damaged.

7. (Previously presented) A multi-functioned wafer aligner comprising:
a rotatable chuck, adapted to receive a semiconductor wafer;
a wafer transfer unit, adapted to position said wafer upon said rotatable chuck;
a sensor body, comprising:
an array of luminous emitters disposed on a first surface of the sensor body for emitting incident rays;

an array of photo detecting sensors disposed on a second surface of the sensor body opposite the first surface for receiving the incident rays emitted by the array of luminous emitters; and

an array of damage-detecting sensors disposed on a third surface of the sensor body orthogonal to the first surface and the second surface for receiving said rays that is reflected off of an edge of said wafer wherein said sensor body is disposed in relation to said rotatable chuck so as to receive an edge of said wafer.

8-10. Cancelled

11. (Currently amended) A method for positioning a wafer and detecting wafer damage, the method comprising:

inserting a peripheral region of a wafer to a sensor body;

emitting rays from an array of luminous emitters on a first surface of the sensor body;

receiving emitted rays by an first array of photo detecting sensors on a second surface of the sensor body opposite the first surface; and

determining a position of the wafer based on the emitted rays received by the first array of photo detecting sensors-;

receiving emitted rays, which are reflected by the wafer, by a second array of photo detecting sensors on a third surface of the sensor body orthogonal to the first surface and the second surface of the sensor body; and

determining wafer damage based on the emitted rays received by the
second array of photo detecting sensors.

12-13. Cancelled